

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,226	03/26/1999	ISABELLE BARA	05725.0362-0	3233
22852	7590 11/25/2003		EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			WELLS, LAUREN Q	
			ART UNIT	PAPER NUMBER
			1617	<i>Q</i> 2
			DATE MAILED: 11/25/2003	77

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/277,226	BARA ET AL.			
		Examiner	Art Unit			
		Lauren Q Wells	1617			
	The MAILING DATE of this communication ap		<u> </u>			
Period for Reply						
THE I - External after - If the - If NO - Failurian - Any I	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a rep o period for reply is specified above, the maximum statutory period ree to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tingly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed  rs will be considered timely. I the mailing date of this communication. CD (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on <u>03 C</u>	October 2003.				
2a)⊠	This action is <b>FINAL</b> . 2b) This	action is non-final.				
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	Disposition of Claims					
<ul> <li>4)  Claim(s) 1,3-60,62,63 and 65-69 is/are pending in the application.</li> <li>4a) Of the above claim(s) 20-22,24,30-39,41,58 and 67 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,3-19,23,25-29,40,42-57,59,60,62,63,65,66,68 and 69 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
	The specification is objected to by the Examine	er.				
•	The drawing(s) filed on is/are: a) ☐ acc		Examiner.			
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.						
Attachment(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit: 1617

#### DETAILED ACTION

Claims 1, 3-60, 62-63 and 65-69 are pending. Claims 20-22, 24, 30-39, 41, 58 and 67 are withdrawn from consideration, as they are directed to non-elected subject matter. The Amendment filed 10/3/03, paper No. 32, cancelled claim 64, added claims 68-69, and amended claims 12, 16, and 63.

Applicant's amendment to the claims and arguments filed 10/3/03, Paper No. 31, are sufficient-in-part to overcome the 35 USC 112 rejections in the previous Office Action. See below for details.

## 112 Rejection Maintained

The rejection of claim 23 under 35 U.S.C. 112 is MAINTAINED for the reasons set forth in the Office Action mailed 7/3/03, Paper No. 31, and those found below.

(i) Regarding the term "functionalized", Applicant argues, "the term is commonly used by organic chemists to denote groups of atoms that confer characteristic chemical properties upon the molecule in which it occurs". This argument is not persuasive, as this definition is vague and indefinite. What are characteristic chemical properties? The metes and bounds of this claim are unascertainable, as it is not possible to ascertain what compounds Applicant is referring to.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1617

Claims 1, 3-19, 23, 25-29, 40, 42-57, 59-60 and 62-63, 65-66, 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 373 661 (661) in view of 6,074,633.

The instant invention is directed toward a water-in-oil emulsion comprising a silicone oil, a dyestuff, and an alpha, omega-substituted oxyalkylenated silicone, wherein the emulsion has a dynamic viscosity of 100mPa.s-20Pa.s, and is directed toward a method for reducing the transfer/migration of a composition by introducing into a composition, an emulsion comprising an alpha, omega-substituted oxyalkylenated silicone in an amount effective to reduce transfer/migration, wherein the composition does not comprise clay.

EP '661 is directed to water-in-oil emulsion cosmetics that contain an emulsifier mixture, an oily base containing a silicone oil and water. The emulsions have a viscosity of 20,000 cps or below at 25 C, which is equivalent to 200 poise or less. See the abstract. Applicant discloses at page 21, 1<sup>st</sup> paragraph that a dynamic viscosity of 100mPa.s to 20Pa.s is equivalent to 100 cps to 200 poise, which range is encompassed by EP '661. Milky lotions, body-care lotions, and liquid foundations are also taught in the abstract.

For oxyalkylenated silicone emulsifiers as part of the emulsifier mixture, see page 3, lines 23-38. For pigments and fillers of instant claims 16, 17 and 50, see page 6, lines 49-55. The total amount of powders including fillers and pigments is from 10-40 wt.%. For a mixture of 5.0 wt.% titanium dioxide, 0.4% red oxide, 0.7% yellow iron oxide and 0.1% black iron oxide pigments with 3.0% talc, see the powder component of example 5 at page 15. For cyclic siloxanes such as cyclotetrasiloxane (n-4) and cyclopentasiloxane (n-5), see page 3, lines 4-6 and examples 2-4 at pages 11-13. EP '661 discloses that the silicone oil can be used in any weight

Art Unit: 1617

percent and that the amount of oily base, which may be only silicone oil, is from 25-45 wt.% (page 3, lines 8-14).

For about 67 wt.% of an aqueous phase containing 5.0% of a C2-6 alcohol (ethanol), 2.0% of a polyol (glycerol), and 0.6 of other adjuvants and active principles and about 33 wt.% of a fatty phase, see example 2. Co-surfactants are disclosed at page 3, line 15 to page 6, line 31.

Since the compositions of EP '661 contain the same amount of filler and silicone oil as instantly claimed they would be expected to have the same weight ratio of filler to silicone oil. Additionally, since EP '661 discloses the same fillers and silicone oils as instantly claimed, it would be expected to meet the formula of instant claims 56 and 57.

EP '661 does not disclose an alpha, omega-substituted oxyalkylenated silicone.

US '633 is directed to cosmetic compositions such as shampoos that contain at least one oxyalkylenated silicone (title and abstract). US '633 teaches that alpha, omega-substituted oxyalkylenated silicone can be used in place of and for the same purpose as oxyalkylenated silicones wherein the oxyalkylene chains are pendant. See page 4, lines 36-55. The preferred oxyalkylenated silicones of US '633 are those of formulas (I) and (II). See page 5, line 50 to page 6, line 5. In formula (I), when R1 is methyl (page 5, line 55) and R2 is CcH2c-O-(C2H4O)a(C3H6O)b-R5 (page 5, line 25), wherein R5 is methyl (page 5, line 56), c is 0-4, a is 0-50, n is 0-500 and m and o are O (page 5, lines 39-46), it encompasses the instantly claimed alpha, omega-substituted oxyalkylenated silicone of claims 3-9. US '633 discloses that the compositions containing the oxyalkylenated silicones have a viscosity greater than 200 mPa.s (page 6, line 11).

Art Unit: 1617

Neither of the references teaches the average molecular weight of R (claims 5 and 9), the weight ratio of oxyethylene groups to oxypropylene groups (claims 6, 7 and 9), the average particle size of the filler (claim 53) or the shape of the filler (claim 54). A silicone meeting the limitations of instant claims 3 and 9 as described above would be expected to exhibit these characteristics. It is within the skill in the art to select optimal parameters of a composition in order to achieve a beneficial effect. One of ordinary skill in the art would have been motivated to select an optimal particle size and shape of the filler powders for aesthetic purposes.

Furthermore, a change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Therefore, absent evidence of unexpected results, the particle size and shape of the filler is not considered critical to the invention.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the alpha, omega-substituted oxyalkylenated silicone of US '633 for the oxyalkylenated silicone of EP '661 because US '633 teach these silicones as interchangeable emulsifiers; thus one of skill in the art would be motivated to substitute one for the other because of the expectation of achieving similar surfactant effects. It is known in the art to substitute equivalent surfactants.

The claims are directed to a method of introducing into a composition an emulsion comprising an effective amount of alpha, omega-substituted oxyalkylenated silicone in an effective amount. Any properties exhibited by or benefits provided the composition are inherent and are not given patentable weight over the prior art. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties Applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15

Art Unit: 1617

USPQ 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. The burden is shifted to Applicant to show that the prior art product does not inherently possess the same properties as instantly claimed product. The prior art teaches introduction into a composition an emulsion containing the same components as instantly claimed, which would inherently reduce transfer/migration, as instantly claimed. Applicant has not provided any evidence of record to show that the prior art compositions do not exhibit the same properties as instantly claimed.

Claims 1, 3-19, 23, 25-29, 40, 42-57, 59-60, 62-63, 65-66, 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terren et al. (6,159,486).

Terren et al. teach water-in-oil emulsions, compositions containing the emulsions, and uses thereof. Specifically taught is a cosmetic composition comprising the water-in-oil emulsion, wherein the composition transfers and/or migrates little (see abstract). The emulsion comprises an emulsifying surfactant, wherein the surfactant is an oxyalkylenated silicone of the formula of the instant invention (see Col. 5, line 50-Col. 7, line 13). The surfactant can comprise 5-12% of the emulsion. Cyclohexadimethylsiloxane is taught as an oil that comprises the fatty phase of the emulsion, wherein the fatty phase can also comprise other oils. The aqueous phase comprises 0-14% of a C2-C6 monoalcohol and/or a polyol. The composition can comprise from 0-5% of a co-emulsifier. The emulsion can further comprise pigments, pearlescent agents, and/or fillers. The pigments comprise 0-20% of the composition and can be selected from iron oxide, titanium oxide, and others. The fillers comprise 0-20% of the composition and can be selected from talc, mica, silica, and others. The fillers are preferably spherical and have a size of less than 25 um. Additives and additional active can be added to the composition in an amount of 0-10%. The emulsions can be in the form of a cosmetic product such as a care product for the

Art Unit: 1617

body and/or the face and/or scalp, or in the form of a make-up, a foundation, a blusher, an eye shadow, an eye liner, a mascara, or a lip composition. The emulsion can further be in the form of a cream, a milk or a serum. A method of applying the composition to the skin is taught. The reference lacks an exemplification of the instant method and composition, lacks the average molecular weight of R, and viscosity. See Col. 5, line 50-Col. 7, line 12; Col. 7, line 60-Col. 9, line 65; Col. 10, line 39-Col. 11, line 33.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to exemplify a method of reducing transfer/migration of composition comprising introducing into the composition an emulsion comprising an alpha, omega-substituted oxyalkylenated silicone in an effective amount, because Terren et al. teach a method of reducing transfer/migration of composition comprising introducing into the composition an emulsion and teaches an alpha, omega-substituted oxyalkylenated silicone of the instant method as imparting stability to the emulsion; thus, one of skill in the art would be motivated to exemplify such a method wherein the emulsion comprises alpha, omega-substituted oxyalkylenated silicone because of the expectation of achieving a stable cosmetic product.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to exemplify a water-in-oil emulsion comprising a silicone oil, dyestuff, alpha, omega-substituted oxyalkylenated silicone because Terren et al. exemplify a water-in-oil emulsion comprising silicone oil and dyestuff and further teach alpha, omega-substituted oxyalkylenated silicones of the instant method as imparting stability to the emulsion; thus, one of skill in the art would be motivated to exemplify such a composition because of the expectation of achieving a stable water-in-oil emulsion.

Art Unit: 1617

While Terren et al. does not provide teachings of the dynamic viscosity of his emulsion, the emulsions of Terren et al. and the instant invention are directed toward the same cosmetic embodiments and the same cosmetic uses. Thus, one would expect similar viscosities.

Furthermore, it would have been obvious to teach the composition of Terren et al. as having a dynamic viscosity of 100mPa.s-20Pa.s because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

While Terren et al. does not teach the molecular weight of "R", it must be the same as that recited in the instant invention, because Terren et al. and the instant invention teach the same compound, wherein "R" of the instant invention is "R2" of Terren et al. and "R" and "R2" comprise exactly the same constituents in exactly the same ranges. Thus, the molecular weights must be the same.

## Response to 103 Arguments

Applicant argues, regarding the 1<sup>st</sup> 103 rejection, "Both of the references describe difficulties with maintaining a stable emulsion; therefore, it would not have been obvious to substitute an element of one in the other, and one skilled in the art would certainly not have expected to be successful in doing so in light of these teachings". This argument is not persuasive. First, the Examiner is unaware of a citation in the references that teaches their emulsions as not stable. Second, the Examiner respectfully points out that US '633 teaches alpha, omega-substituted oxyalkylenated silicones in claims 1 and 12 of the reference, as imparting stability to water-in-oil emulsions. Third, the Examiner respectfully points out that US

Art Unit: 1617

'633 teaches the interchangeability of the oxyalkylenated silicones of EP '661 with that of the alpha, omega substituted oxyalkylenated silicones of claims 1 and 12 of '633.

Applicant argues, "the use of a composition according to one reference would destroy the intended use of a composition according to the other reference, as the '633 patent is directed to a "detergent cosmetic composition" and EP '661 relates to a water-in-oil cosmetic composition". This argument is not persuasive. First, the Examiner respectfully points out that these uses are not completely incompatible, as both references are directed to cosmetic compositions that are applied to the skin. Second, the Examiner respectfully points out that it is within the skill of the artisan, in the cosmetic art, to substitute on surfactant for another, when the surfactants are taught as interchangeable, even if the cosmetic uses are not exactly the same.

Regarding the 2<sup>nd</sup> 103 rejection, Applicant argues, "The reference does not teach or suggest that an alpha, omega substituted oxyalkylenated silicone in an emulsion can reduce or eliminate migration or transfer of a product. Rather, the Examiner is engaging in impermissible hindsight in using the prior art to arrive at the present invention". This argument is not persuasive. First, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Art Unit: 1617

Second, the Examiner respectfully points out that the reference specifically teaches that water-in-oil emulsions comprising poly(C1-C20) alkylsiloxanes, such as alpha, omega-substituted oxyalkylenated silicone, transfer and/or migrate little. Thus, the Examiner is not using hindsight reconstruction, but is merely relying upon the teachings of the reference. Third, the Examiner respectfully points out that any properties exhibited by or benefits provided by the compound are inherent and are not given patentable weight over the prior art, as a compound and its properties are inseparable. Thus, while the reference may not explicitly state that the alphaomega-substituted oxyalkylenated silicone imparted a given property, the properties that this compound imparts are inherent. Thus, since '486 teaches introducing into a composition an emulsion containing the same components as instantly claimed, the prior art's composition ('486) would inherently reduce transfer/migration, as instantly claimed.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1617

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is (703) 305-1878. The examiner can normally be reached on M-F (7-4:30), with alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (703)305-1877. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

lqw

SREENI PADMANABHAN SUPERVISORY PATENT EXAMINER

11/24/03